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PATENT NO. : 7,583,760 B2

APPLICATION NO.: 10/535,479

ISSUE DATE: September 1, 2009

INVENTOR(S) : Bernhardsson, et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Page 2, in Field (56), under "OTHER PUBLICATIONS", in Column 2, Line 2, delete "Hybird ARQ" and insert - - Hybrid ARQ - -, therefor.

In Column 1, Line 63, delete "comprising" and insert - - comprising: - -, therefor.

In Column 2, Line 4, delete "signal;" and insert - - signal; - -, therefor.

In Column 2, Line 42, delete "amplifier" and insert - - amplifier; - -, therefor.

In Column 4, Line 30, delete "comprising" and insert - - comprising: - -, therefor.

In Column 4, Line 56, delete "comprises" and insert - - comprises: - -, therefor.

In Column 5, Line 35, delete "schematic" and insert - - schematically - -, therefor.

In Column 6, Line 53, delete "O-component;" and insert - - Q-component; - -, therefor.

In Column 7, Line 45, delete " $S_{l,m}$ " and insert - - $s_{l,m}$ - -, therefor.

In Column 7, Line 46, delete " $P(S_{l,m}=i|r)$," and insert - - $P(s_{l,m}=i|r)$, - -, therefor.

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It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 7, Line 47, delete " $S_{l,m}$ " and insert - - $s_{l,m}$ - -, therefor.

In Column 7, Line 49, delete " $S_{l,m}$ " and insert - - $s_{l,m}$ - -, therefor.

In Column 7, Line 50, delete " $S_{l,m}$ " and insert - - $S_{l,m}$ - -, therefor.

In Column 7, Line 53, delete " $S_{l,m}=0$ and $S_{l,m}=1$ " and insert - - $S_{l,m}=0$ and $S_{l,m}=1$ - -, therefor.

In Column 7, Line 55, delete " $S_{l,m}=1$ and $S_{l,m}=0$ " and insert - - $S_{l,m}=0$ and $S_{l,m}=1$ - -, therefor.

In Column 7, Line 60, delete "P $(r|S_{l,m}=i)$ " and insert - - $P(r|S_{l,m}=i)$ - -, therefor.

$$P(S_{\ell,m} = 1) = c \sum_{S,E1_{1,m}} P(r, s_{\ell,m}) = 0, 1.$$

In Column 7, Line 64, in Equation (2), delete "

and insert --
$$P\langle r|s_{l,m} = i \rangle = c \sum_{S_l \in A_{l,m}} P\langle r|s_{l,m} \rangle$$
, $i = 0, 1, --$, therefor.

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It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 8, Line 1, delete " $A_{l,m}=\{S_l|S_{l,m}=i\}$ " and insert - - $A_{i,m}=\{s_l|s_{l,m}=i\}$ - -, therefor.

In Column 8, Line 6, delete "P $(r,S_{l,m})$." and insert - - $P(r,s_{l,m})$. - -, therefor.

In Column 8, Lines 11-15, in Equation (3), delete $\max P(r, s_{im})$

$$L_{l,m} = \log \frac{s_i \varepsilon A_{l,m}}{\max P(r, s_{l,m})} = \log \frac{P(r \mid \tilde{s}_{i,l,m})}{P(r \mid \tilde{s}_{i,l,m})}$$

$$s_i \in A_{\alpha,m}$$
 " and

$$L_{l,m} = \log \frac{\sum_{l=A_{l,m}}^{max} \frac{P\langle r, s_{l,m} \rangle}{\sum_{l=A_{l,m}}^{max} \frac{P\langle r, s_{l,m} \rangle}{\sum_{l=A_{l,m}}^{nax} \frac{P\langle r, s_{l,m} \rangle}{\sum_$$

insert - -

In Column 8, Line 19, delete " $\hat{S}_{l,m}$, i=0," and insert - - $\hat{S}_{i,l,m}$, i=0, - -, therefor.

In Column 8, Line 22, after "by" delete "the".

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It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

$$\log \sum_{s \in A_{l,m}} P(r, s) \approx \log_{s \in A_{l,m}}^{max} P(r, s)$$
In Column 8, Line 26, in Equation (4), delete " $s \in A_{l,m}$,"

and insert -- $\log \sum_{s \in A_{i,m}} P(r,s) \approx \log \max_{s \in A_{i,m}} P(r,s)$ --, therefor.

In Column 8, Line 37, delete " σ_2 ," and insert - - σ^2 , - -, therefor.

In Column 8, Line 51, delete " S_1 ," and insert - - S_1 , - -, therefor.

In Column 8, Line 52, delete "Si," and insert - - s₁, - -, therefor.

In Column 8, Line 56, delete "S₁." and insert - - s₁. - -, therefor.

In Column 8, Line 60, delete " S_1 " and insert - - s_1 - -, therefor.

In Column 8, Line 62, delete " S_1 " and insert - - s_1 - -, therefor.

In Column 8, Line 63, delete " S_1 " and insert - - S_1 - -, therefor.

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PATENT NO. : 7,583,760 B2

APPLICATION NO.: 10/535,479

ISSUE DATE : September 1, 2009

INVENTOR(S) : Bernhardsson, et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 8, Line 64, delete " S_1 ." and insert - - S_1 . - -, therefor.

In Column 9, Line 25, delete "P ($S_{l,m}=i|r$," and insert - - P($S_{l,m}=i|r$, - -, therefor.

In Column 9, Line 26, delete " $S_{l,m}=i$," and insert - $s_{l,m}=i$, - -, therefor.

In Column 9, Line 58, delete "WDCMA." and insert - - WCDMA. - -, therefor.

In Column 10, Lines 11-12, delete " $w=[w_1 \ W_2 \dots \ W_N]$ " and insert - - $w=[w_1 \ w_2 \dots \ w_N]$ - -, therefor.

In Column 10, Line 25, delete "hr" and insert - - h_r - -, therefor.

In Column 10, Line 33, delete "wHhr" and insert - - wHhr - -, therefor.

In Column 10, Line 42, in Equation (7), delete " $S_j=gw^Hh_rS_j$, =1,..., M." and insert - $\hat{S}_i=gw^Hh_rS_i$, j=1,..., M. - -, therefor.

In Column 10, Line 46, in Equation (8), delete " $L_{l,m}=K\cdot(|\tilde{r}-s_{0,l,m}|^2-|\tilde{r}-\tilde{s}_{1,l,m}|^2)$," and insert -- $L_{l,m}=K\cdot(|\tilde{r}-\tilde{s}_{0,l,m}|^2-|\tilde{r}-\tilde{s}_{1,l,m}|^2)$, --, therefor.

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PATENT NO. : 7,583,760 B2

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ISSUE DATE: September 1, 2009

INVENTOR(S) : Bernhardsson, et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 12, Line 3, delete "example" and insert - - example, - -, therefor.

In Column 12, Lines 21-30, delete "If a change in......in FIG.4." and insert the same in line 22, as a new paragraph.

In Column 13, Line 39, delete "hand." and insert - - hand, - -, therefor.

In Column 13, Lines 50-51, delete "However, other......the invention." and insert the same in line 49, after "a received sequence." as a continuation of the paragraph.

In Column 13, Line 67, in Claim 1, delete "modules;" and insert - - module; - -, therefor.

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